

Categories have been arranged for alignment with CEN's 2019-2024 [Strategic Plan](#).

1. Provide Value

- CEN Fiscal Year 2024 (FY24) Rate Announcement
 - Announced Dec 1, 2022; all rates remain the same from FY23 to FY24, effective July 1, 2024.
 - New: pricing includes discounts for bandwidth tiers 1G - 10G for 5-year agreements
 - The CEN team performed product and pricing review, with the support of several member IT Directors, and conducted an analysis of CEN's Dedicated Internet Access (DIA) service and pricing to help determine value and pricing options.
- DDoS Mitigation Summary Review
 - 2023-2024 Academic Year (August 1, 2022 – November 1, 2022)

Number of TMS Mitigations	Volume of Traffic Passed by TMS	Volume of Traffic Dropped by TMS	Volume of Largest TMS Mitigation	Rate of Largest TMS Mitigation	Duration of Longest TMS Mitigation
59	965.09 GB	2.06 TB	910.69 GB	20.96 Gbps	0d 10h 7m
↑1.72%	↓35.79%	↑107.88%	↓1.53%	↓22.73%	↑123.67%

Bottom row indicates increase or decrease from prior period (March 31 2022 22:58 - August 01 2022 0:00).

- 2022 Calendar Year (January 1, 2022 – November 1, 2022)

Number of TMS Mitigations	Volume of Traffic Passed by TMS	Volume of Traffic Dropped by TMS	Volume of Largest TMS Mitigation	Rate of Largest TMS Mitigation	Duration of Longest TMS Mitigation
204	38.82 TB	19.62 TB	18.32 TB	29.75 Gbps	58d 7h 42m
↓48.74%	↑81.89%	↓50.84%	↑205.38%	↓22.56%	↓61.14%

Bottom row indicates increase or decrease from prior period (January 31 2021 22:58 - January 01 2022 0:00).

- CT Library Fiber Consortium – Fiber to the Library (FTTL)
 - Note: No change from last meeting
 - Project to connect libraries through federal E-rate and matching State Library bonded funds.
 - Many project sites connect underserved communities where connectivity options have remained relatively unchanged for decades. This project provides high-quality service at reasonable costs to bridge gaps in the digital divide and help libraries continue to thrive as community assets.
 - Phase 8: Awarded February 21, 2022. 64 libraries are eligible and 3 are moving forward. This is the final phase of the program.
 - The current project across all phases (1–7) will bring total fiber-connected libraries to 146 representing 76% of all 191 libraries statewide.
 - The remaining libraries, not currently connected to CEN are eligible to connect with ARPA-CPF funds. The CEN ARPA project is tentatively scheduled to commence in January of 2023 pending US Treasury approval and authorization of funds.
- CT Library Fiber Consortium – Internal Connections (FTTL-IC)
 - Program announced December 3, 2021. <https://ctedunet.net/fttl-ic/>
 - Goal is to help libraries with internal network infrastructure to better serve library operations.
 - Libraries will receive assessments, prioritized remediation plans, and awards to assist each.
 - High Level Status
 - 41 libraries: 40 assessments complete, 1 scheduled 12/6
 - Scheduled Onsite Visit - 1
 - Post Assessment Review – 8
 - Assessment Report Writing – 3
 - Finalizing Assessment Report – 14, delivered by 12/15
 - Assessment Reports Delivered – 10

- Assessments and report completion projected at end of calendar year
- New Members/Customers since the last Commission meeting (in order of turn up)
 - UCHC (CT Blvd., East Hartford)
 - CGA (Capitol State Police)
 - WorkspaceCT
 - UCHC (Talcott Road, Farmington)

Current Member Count = 679

*Effective 12-1-21 member count process has been adjusted to reflect multi-site organizations as one member throughout the community.

2. Ignite Innovation

- NTIA Middle Mile Grant Program
 - CEN Submitted a proposal for the 'Connecticut Scaled Open Access Network and Anchor Resiliency' project (CT-SOANAR) on September 29, 2022 in response to a Notice of Funding Opportunity, NTIA-MMG-2022 announced May 5 2022, applications due Sept 30, 2022, notice of awards March 1, 2023.
 - Projects must be implemented within 5 years of award.
 - <https://broadbandusa.ntia.doc.gov/sites/default/files/2022-05/MIDDLE%20MILE%20NOFO.pdf>
 - \$20.7M Project, \$12.2M requested from NTIA, \$8M from CEN/CT, \$500K in-kind contribution.
 - The CT-SOANAR project will advance the Middle Mile Grant Program objectives and the strategic broadband goals of the State of Connecticut by accomplishing the following:
 - Encourage middle mile infrastructure expansion and extension to reduce the cost of newly connecting unserved and underserved areas to the Internet backbone
 - Promote broadband connection resiliency through alternative network connection paths that prevent single points of failure
 - Materially reduce end user broadband prices resulting from funded middle mile infrastructure
 - Materially reduce latency experienced by end users in remote or insular areas
 - Benefit high-poverty counties, persistent poverty counties, and/or a substantial number of end users/households that meet the defined criteria
 - Offer access to the funded middle mile infrastructure, in perpetuity, on an open access basis
 - The CT-SOANAR topology enables connection of unserved anchor institutions
 - Demonstrate the project's climate and natural disaster resilience
 - Use community benefit agreements
 - CT-SOANAR incorporated input from our key stakeholders, including planned last-mile providers, community and anchor institutions, existing CEN customers who will benefit from the proposed upgrades, and Connecticut's Office of the Governor. Additional state-level broadband stakeholders who were consulted include the Office of Consumer Council - State Broadband Office, the Bureau of Energy and Technology Policy's Office of Telecommunications and Broadband, the CT Commission for Educational Technology, and the Office of Policy and Management.
 - 19 letters of support reflect the agreement of all these stakeholders that this project is the highest priority middle mile initiative for Connecticut.

- Governor Lamont has committed to the broader American Rescue Plan Act (ARPA), BEAD, and Digital Equity programs along with the Middle Mile Grant Program to define a holistic set of activities to address middle mile, last-mile, multi-dwelling unit, urban, and rural needs, and affordability across the state.
- Grant Development team included CEN Director Ryan Kocsondy, CEN Team Leads Paul Tarsa, Peter Correia, and Rick Cheung; CEN Optical Engineer Raymond Carcano; Executive Sponsor Mark Raymond, CT-DAS CIO; State assistance from David Lukens, OPM, for GIS mapping; Michael Barrera, DAS, as Staff Council. Consultant team headed by Rob Vietzke, CEN's first director and now of <https://insightinfraservices.com/>, consisting of a project manager, grant writer, editor, and strategic broadband advisor. Note: CEN self-funded the consultants.
- eduroam <https://www.eduroam.us/>
 - Goal is to address digital divide issues impacting students' learning and provide a more seamless network access experience for students.
 - Tom Dillon helping coordinate activities as CET Infrastructure Advisory Council Chair, with CEN resources and fiscal support. This is a crossover item between CET Infrastructure Advisory and CEN Service Management Advisory Councils.
 - Pilots: Suffield Academy and Waterbury Public Schools. Darien Public Schools is expecting to launch this summer. Interest also received from Russell Library and Coventry Public Schools. Goodwin University has initiated their own license agreement.
 - 71 respondents to Secure WiFi & eduroam readiness in schools and libraries. Will re-send and collect more info.
 - CEN's application for the Internet2 eduroam [Support Organization](#) program was accepted and will be one of 5 across the country. <https://internet2.edu/internet2-announces-new-eduroam-support-organizations/>
 - Agreement reached with Internet2 on terms for extending eduroam purchasing agreement through the end of 2023, to be succeeded by Support Organization agreement in 2024.
 - Support Agreement Signed or in progress for: Suffield Academy, New Haven School District, Darien School District, Waterbury School District
- Additional services are in development and will be prioritized based on community feedback
 - Note: No change from last meeting
 - With help of SMAC Chair(s), items are categorized and prioritized
 - Unified Communications RFP team meeting monthly to define service categories and requirements and targeting Q3 for RFP publication.
 - UConn procurement will assist with RFP development
 - Aligning initiatives with the existing UConn RFP cycle where possible to make more efficient use of time and effort.

3. Foster Collaboration

- Member Training Opportunities <https://ctedunet.net/engagement-events/>
 - Data Security: Privacy, Breach, Retention; Series Summary: Join us and our data security experts for informative and interactive sessions that will provide IT, administrative, and executive staff vital updates on data privacy and retention responsibilities, cybersecurity threats and safeguards, and best practices in all areas.
 - Member Training Webinar: Data Privacy
 - Stats: 120 registered participants, 74 attended participants

- Tuesday September 27, 1 PM - 2:30 PM
- Presenter: [Gwen Zittoun](#)
- Member Training Webinar: Data Breach
 - Stats: 99 registered participants, 51 attended participants
 - Wednesday October 26, 2 PM - 3:30 PM
 - Presenter: [David Sun](#)
- Member Training Webinar: Data Retention
 - Stats: 124 registered participants, 86 attended participants
 - Thursday November 17, 1 PM - 2:30 PM
 - Presenters: [Elise Marzik](#), [.pdf LeAnn Power](#), [.pdf Michelle Laubin](#), [Bryan LeClerc](#)
- EDAC - Engagement and Development Advisory Council
 - Co-Chairs, Karen Skudlarek, UCONN, and John Mercier, Regional District 17
 - 10th Annual CEN Conference
 - May 11, 2023 - Connecticut Convention Center
 - Submit a session proposal: <https://www.cvent.com/c/abstracts/13f5f44b-3009-4706-bbee-79ac58e75ac3>
 - Deadline: December 30, 2022
 - Registration so far (as of 11/28/22):
 - Total attendees: 82
 - Sponsors: 11
 - Register here: <https://web.cvent.com/event/e9db8eac-4941-4320-baeb-89e096c1c43f/summary>
- SMAC- Service Management Advisory Council
 - Co-Chairs: Matt Ross & Jonathan Garbutt
 - Committee members organizing around community RFPs for
 - Unified Communications
 - Security Services
 - CIPA filtering
- Connecticut Higher Education Roundtable on Information Security (CHERIS) <https://ctedunet.net/cheris/>
 - Co-Chairs: Brad Tudisca, CCSU; Owen Brandt, ECSU; Vince Spiars, Quinnipiac University
 - Forum of Higher Education IT security professionals that meets quarterly to collaborate on IT solutions, discuss best practices, and share security challenges.
 - CHERIS was founded in 2012 by UConn and Quinnipiac University. In 2022, after years of inactivity and at the request of CCSU, ECSU, and Wesleyan, CEN re-chartered and re-started the roundtable and committed to providing administrative support to the co-chairs on a go forward basis, as well as help sustain the co-chair roles over time.
 - First meeting was November 18, hosted by CCSU

4. Promote Advocacy

- Governor's Biennium Budget, HB5037, American Rescue Plan Act - Coronavirus Relief Fund (ARPA-CPF)
 - PA 22-118 <https://search.cga.state.ct.us/2022/PA/pdf/2022PA-00118-R00HB-05506-PA.pdf>
Final Authorizations below
 - \$10,719,936 – Everybody Learns WiFi Expansion + \$719,936 from June session
 - \$21,225,474 – Grant funding for municipalities and libraries to connect to CEN
 - \$41,109,884 - CEN Next Generation Infrastructure Upgrades
 - \$911,195 – Grant funding for charter Schools to connect to CEN
 - All projects were submitted Sept 21 through OPM to US Treasury for funding allocations.

- Sept 23 - US Treasury announced they are low on administrative funding for the program, impacting approvals of proposals. No update since.
 - https://home.treasury.gov/system/files/136/Adeyemo-Administrative-Flexibility-Grantee-Letter_20220923.pdf
- 2023 CEN Outstanding Leader Awards (COLA) <https://ctedunet.net/cola/>
 - 'CEN Members play a key role in the success of our community. To acknowledge those contributions, CEN presents the Outstanding Leader Awards annually to any individual from a CEN member organization who has provided extraordinary leadership, energy, ideas, and achievements for the advancement and development of the CEN community, its products and/or services, and/or its foundational mission, vision, and values.'
 - Submissions are open:
<https://docs.google.com/forms/d/e/1FAIpQLSeGESK3EHYuMPY48Ag67k4uHNxNGTeeA-jsUhjvweCLV-mVA/viewform>
 - Awards will be presented at the CEN annual conference.
- Everybody Learns WiFi - Program End <https://ctedunet.net/eli-programend/>
 - After two successful years, the Everybody Learns WiFi Initiative is ending and subsidized support for the wireless access points will cease as of December 31, 2022.
 - Equipment is property of the host entity. 3 of 5 years remain on pre-paid licensing. Options for equipment transition collected by form response are:
 - Member to claim licensing and self-manage moving forward
 - Remove access point or leave in place (optional to return to CEN or swap with another member).
 - Subscribe to CEN Managed firewall service.
 - The Everybody Learns WiFi Initiative helped tens of thousands of students and adults connect to free, high-quality WiFi through the pandemic to engage in remote learning, telehealth, and state and municipal services.
 - The program's success hinged on the trusted CEN community partnerships and is a testament to the community's willingness to step up and help during a crisis. In addition, the efficacy of the program paved the way for additional ARPA funds to be used in a similar manner.

5. Enhance Core Resources

- CEN Staff
 - CEN currently has 12 full-time staff members, 4 part-time student workers, and 1 volunteer (1 day /week), 1 Fellow
 - Searches (in progress)
 - Network Systems, Security, Automation - Interviewing
 - Financial Assistant 1 - Interviewing
 - Project Manager - Initiation
- Infrastructure Improvements/Investments
 - CEN was allocated ~ \$2.5M in CEPF funds for equipment maintenance improvements to the infrastructure. This was less than the requested amount and items are being re-prioritized, re-quoted, and sequenced based on price and availability of equipment.
 - Of Note - Component delays are impacting lead times for items such as routers and switches. Lead times can be anywhere from 120-180 days for orders with little relief in sight. Some items are now projected to be up to a year.
 - All other project on hold due to manufacturing and shipping delays.
- Uninterruptible Power Supply and Power Distribution Unit (UPS & PDU) Hub Site Upgrades

- Project to replace the existing UPS and PDUs at all hub site that support our distribution nodes throughout the state. Capabilities include remote management of UPS and new per port power monitoring and management of Smart PDUs, and environmental sensors tracking temperature and humidity.
- Status:
 - Uninterruptible Power Supply (UPS) upgrades at hub sites – Complete
 - Smart PDU upgrades at hub sites – 90% complete
 - Environmental Sensors – 90% complete
- Database Audit and True Up
 - Goal is too true up all records in the network management database resulting in improved network operations, enhanced notifications to members, and more accurate billing operations.
 - Scope includes documentation update, processes updates, node audit (servers, switches, routers), circuits, fiber inventory, interface descriptions, data structure hierarchies, CEN services, subscriber services, etc.
 - Project completion target is May 2023.
- Route Reflectors (RR)
 - Project to replace existing route reflectors with new that have greater route scale and features, and enable Ethernet Virtual Private Network (EVPN) capabilities.
 - Technical: A route reflector is a designated/dedicated router that will advertise and reflect routes learned from other iBGP peer routers in a service provider network. This allows all iBGP speakers within your autonomous network to learn about the available routes in a more efficient manner and without introducing loops.
 - Status: Two of the four routers are in place. Need new DC power supplies for the other two and projected completion in June/July 2023.
- Filtering Capacity Expansion
 - Project to expand on-net and in-line Children’s Internet Protection Act (CIPA) filtering capacity for CEN Members by adding one iBoss NBC-14 to each of the Storrs and Hartford based clusters. Project Highlights include:
 - Increases capacity by 50% at each site; 84 nodes total
 - IPv6 enablement
 - Updated Status Reporting: https://status.net.cen.ct.gov/grafana/d/heUwCM_Mz/iboss-filter-connections?orgId=2